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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	-
10/760,189	01/21/2004	Kia Silverbrook	MPA24US	2155	
24011	7590 09/07/2006		EXAM	EXAMINER	
SILVERBRO	OOK RESEARCH PT	Y LTD	NGUYEN	, LAM S	
393 DARLING	G STREET				
BALMAIN,	NSW 2041		ART UNIT	PAPER NUMBER	
ΔΙΙΣΤΡΔΙΙΔ			2051		_

DATE MAILED: 09/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)	
Office Asticus Occurrent	10/760,189	SILVERBROOK ET AL.	
Office Action Summary	Examiner	Art Unit	
	LAM S. NGUYEN	2853	
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the	correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPI WHICHEVER IS LONGER, FROM THE MAILING I - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period: - Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be tind I will apply and will expire SIX (6) MONTHS from the, cause the application to become ABANDONE	N. nely filed the mailing date of this communication (1) (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on			
	—· s action is non-final.		
3) Since this application is in condition for allowa		osecution as to the merits	is
closed in accordance with the practice under	•		
Disposition of Claims			
4)⊠ Claim(s) <u>1-5</u> is/are pending in the application.			
4a) Of the above claim(s) is/are withdra			
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1-5</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/	or election requirement.		
Application Papers			
9) ☐ The specification is objected to by the Examin	er		
10)⊠ The drawing(s) filed on <u>24 January 2004</u> is/ard		I to by the Examiner.	
Applicant may not request that any objection to the	•	•	
Replacement drawing sheet(s) including the corre			(d).
11) ☐ The oath or declaration is objected to by the E	xaminer. Note the attached Office	Action or form PTO-152.	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreiga) All b) Some * c) None of:	n priority under 35 U.S.C. § 119(a)-(d) or (f).	
 Certified copies of the priority documer 	its have been received.		
Certified copies of the priority documer	its have been received in Applicat	ion No	
Copies of the certified copies of the price	•	ed in this National Stage	
application from the International Burea			
* See the attached detailed Office action for a lis	t of the certified copies not receive	ed.	
Attachment(s)			
1) Notice of References Cited (PTO-892)	4) Interview Summary		
 Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 	Paper No(s)/Mail D 5) Notice of Informal F	ate Patent Application (PTO-152)	
Paper No(s)/Mail Date 11/03/2004.	6) Other:	,	

DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1. Claims 1-4 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 6/5/1 of U.S. Patent No. 7077505.

Claim 6/5/1 of U.S. Patent No. 7077505 discloses a printhead assembly, comprising:

Regarding to claim 1:

at least one printhead module comprising at least two printhead integrated circuits, each of which has nozzles formed therein for delivering printing fluid onto the surface of print media, a support member supporting and carrying the printing fluid for the at least two printhead integrated circuits, and an electrical connector for connecting electrical signals to the at least two printhead integrated circuits (*column 39, lines 45-53*); and

Art Unit: 2853

a plurality of longitudinally extending electrical conductors for providing power from a power supply to the at least two printhead integrated circuits (*column 40*, *lines 1-4*), being arranged as two groups of electrical conductors respectively connected to the power supply at respective ends of the printhead assembly, respective ones of electrical conductors of the two groups of electrical conductors being connected together at abutting regions intermediate the ends of the printhead assembly (*column 40*, *lines 27-35*).

Regarding to claim 2: further comprising a casing in which the at least one printhead module and the plurality of electrical conductors are removably mounted (column 40, lines 5-8).

Regarding to claim 3: further comprising drive electronics incorporating at least one controller for controlling the printing operation of at least one of the at least two printhead integrated circuits via the electrical connector, wherein power is provided to the drive electronics by the electrical conductors via the electrical connector (*column 39, line 54 to column 40, line 5*).

Regarding to claim 4: wherein the abutting regions of the individual electrical conductors are arranged in overlapping relationship (*claim 6 and column 40*, *lines 35-38*).

Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 6/5/1 of U.S. Patent No. 7077505 includes all limitations of the claimed invention.

2. Claim 5 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 6/5/1 of U.S. Patent No. 7077505 in view of claim 7 of the same U.S. patent.

Claim 6/5/1 of U.S. Patent No. 7077505 discloses the claimed invention as discussed above except wherein the at least one printhead module is formed as a unitary arrangement of the at least two printhead integrated circuits, the support member, the electrical connector, and at least one fluid distribution member mounting the at least two printhead integrated circuits to the support member; and the support member has at least one longitudinally extending channel for carrying the printing fluid for the printhead integrated circuits and includes a plurality of apertures extending through a wall of the support member arranged so as to direct the printing fluid from the at least one channel to associated nozzles in both, or if more than two, all of the printhead integrated circuits by way of respective ones of the fluid distribution members.

Claim 7 of U.S. Patent No. 7077505 discloses wherein the at least one printhead module is formed as a unitary arrangement of the at least two printhead integrated circuits, the support member, the electrical connector, and at least one fluid distribution member mounting the at least two prinhead integrated circuits to the support member; and the support member has at least one longitudinally extending channel for carrying the printing fluid for the printhead integrated circuits and includes a plurality of apertures extending through a wall of the support member arranged so as to direct the printing fluid from the at least one channel to associated nozzles in both, or if more than two, all of the printhead integrated circuits by way of respective ones of the fluid distribution members (*claim 7, column 40, lines 39-54*).

Therefore, it would have been obvious for one having ordinary skill in the art at the time invention was made to modify the printing assembly disclosed by claim 6/5/1 of U.S. Patent No. 7077505 to include the fluid distribution member as disclosed by claim 7 of U.S. Patent No. 7077505. The motivation for doing so would have been able to distribute the fluid to all

Art Unit: 2853

printhead integrated circuits as taught by claim 7 of U.S. Patent No. 7077505 (column 40, lines 50-54).

3. Claims 1-4 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 8/7/6/5/1 of copending Application No. 10/760191 (amendment filed on 04/20/2006).

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim 8/7/6/5/1 of copending Application No. 10/760191 discloses a printhead assembly, comprising:

Regarding to claim 1:

at least one printhead module comprising at least two printhead integrated circuits, each of which has nozzles formed therein for delivering printing fluid onto the surface of print media, a support member supporting and carrying the printing fluid for the at least two printhead integrated circuits, and an electrical connector for connecting electrical signals to the at least two printhead integrated circuits (*claim 1, lines 1-7*); and

a plurality of longitudinally extending electrical conductors for providing power from a power supply to the at least two printhead integrated circuits (*claim 6*), being arranged as two groups of electrical conductors respectively connected to the power supply at respective ends of the printhead assembly, respective ones of electrical conductors of the two groups of electrical conductors being connected together at abutting regions intermediate the ends of the printhead assembly (*claim 7*).

Regarding to claim 2: further comprising a casing in which the at least one

printhead module and the plurality of electrical conductors are removably mounted (claim 1, line 8).

Regarding to claim 3: further comprising drive electronics incorporating at least one controller for controlling the printing operation of at least one of the at least two printhead integrated circuits via the electrical connector, wherein power is provided to the drive electronics by the electrical conductors via the electrical connector (*claim 5*).

Regarding to claim 4: wherein the abutting regions of the individual electrical conductors are arranged in overlapping relationship (*claim 8*).

Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 8/7/6/5/1 of copending Application No. 10/76019 includes all limitations of the claimed invention.

4. Claim 5 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 8 of copending Application No. 10/760191 (amendment filed on 04/20/2006) in view of claim 9 of the same copending appplication.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim 8 of copending Application No. 10/760191 discloses the claimed invention as discussed above except wherein the at least one printhead module is formed as a unitary arrangement of the at least two printhead integrated circuits, the support member, the electrical connector, and at least one fluid distribution member mounting the at least two printhead integrated circuits to the support member; and the support member has at least one longitudinally extending channel for carrying the printing fluid for the printhead integrated circuits and includes

a plurality of apertures extending through a wall of the support member arranged so as to direct the printing fluid from the at least one channel to associated nozzles in both, or if more than two, all of the printhead integrated circuits by way of respective ones of the fluid distribution members.

Page 7

Claim 9 of copending Application No. 10/760191 discloses wherein the at least one printhead module is formed as a unitary arrangement of the at least two printhead integrated circuits, the support member, the electrical connector, and at least one fluid distribution member mounting the at least two prinhead integrated circuits to the support member; and the support member has at least one longitudinally extending channel for carrying the printing fluid for the printhead integrated circuits and includes a plurality of apertures extending through a wall of the support member arranged so as to direct the printing fluid from the at least one channel to associated nozzles in both, or if more than two, all of the printhead integrated circuits by way of respective ones of the fluid distribution members (*claim 9*).

Therefore, it would have been obvious for one having ordinary skill in the art at the time invention was made to modify the printing assembly disclosed by claim 8 of copending Application No. 10/760191 to include the fluid distribution member as disclosed by claim 9 of copending Application No. 10/760191. The motivation for doing so would have been able to distribute the fluid to all printhead integrated circuits as taught by claim 9 of copending Application No. 10/760191 (claim 9, lines 8-10).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2853

A person shall be entitled to a patent unless –

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 5. Claims 1-2, 4-5 are rejected under 35 U.S.C. 102(a) as being anticipated by Silverbrook et al. (US 6612240).

Silverbrook et al. ('240) discloses a printhead assembly, comprising:

at least one printhead module comprising at least two printhead integrated circuits (FIG. 14, elements 114), each of which has nozzles formed therein for delivering printing fluid onto the surface of print media (column 6, lines 22-30), a support member supporting and carrying the printing fluid for the at least two printhead integrated circuits (FIG. 13, element 120), and an electrical connector for connecting electrical signals to the at least two printhead integrated circuits (FIG. 9, element 98); and

a plurality of longitudinally extending electrical conductors for providing power from a power supply to the at least two printhead integrated circuits (*FIG. 14, elements 124 and 122*), being arranged as two groups of electrical conductors respectively connected to the power supply at respective ends of the printhead assembly, respective ones of electrical conductors of the two groups of electrical conductors being connected together at abutting regions intermediate the ends of the printhead assembly ((*FIG. 14, element 122*).

Regarding to claim 2: further comprising a casing in which the at least one printhead module and the plurality of electrical conductors are removably mounted (FIG. 9, element 56).

Regarding to claim 4: wherein the abutting regions of the individual electrical conductors are arranged in overlapping relationship (FIG. 14, element 122).

Page 9

Art Unit: 2853

Regarding to claim 5: wherein the at least one printhead module is formed as a unitary arrangement of the at least two printhead integrated circuits, the support member, the electrical connector, and at least one fluid distribution member mounting the at least two printhead integrated circuits to the support member; and the support member has at least one longitudinally extending channel for carrying the printing fluid for the printhead integrated circuits and includes a plurality of apertures extending through a wall of the support member arranged so as to direct the printing fluid from the at least one channel to associated nozzles in both, or if more than two, all of the printhead integrated circuits by way of respective ones of the fluid distribution members (FIG. 11, element 136).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAM S. NGUYEN whose telephone number is (571)272-2151. The examiner can normally be reached on 7:00AM - 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, STEPHEN D. MEIER can be reached on (571)272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

Application/Control Number: 10/760,189

Art Unit: 2853

Page 10

like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LAM SON NGUYEN